

Toyota Motor Engineering &
Manufacturing North America, Inc.
1555 Woodridge Road
Ann Arbor, MI 48105
734-995-2600

December 17, 2010

Toyota-DIR-20101219

***EDIR – VERR Coordinator
Compliance and Innovative Strategies Div.
U.S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105***

Re: Submission of Emissions Defect Information Report

Dear EDIR Coordinator:

Pursuant to the requirements outlined in Part 85 (Subpart T) of 40CFR, we are providing an Emissions Defect Information Report (EDIR) on the 2006-2008 Highlander HV and RX400h models with the 3MZ-FE engine in test groups 6TYXT03.3CC1, 7TYXT03.3CC1, 8TYXT03.3CCU and 8TYXT03.3CC4.

This EDIR presents information about a condition where the Malfunction Indicator Lamp (MIL) is activated (MIL ON) and the Diagnostic Trouble Codes P0A7A, P0A78 are stored in the ECM. This condition results in the vehicle going into “Fail-Safe” mode with only the engine mode being operational. The hybrid function of the vehicle will be deactivated.

If you have any questions regarding this matter, please contact Mr. Tom Beierschmitt of my staff at 734/995-3743 or email: tom.beierschmitt@tema.toyota.com.

Sincerely,



Kevin D. Webber
General Manager
Vehicle Regulation and Certification Engineering

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cc: Ms. Annette Hebert - CARB

1. Manufacturer's Corporate Name Affiliated U.S. Importing Company

Toyota Motor Corporation	Toyota Motor Sales, USA Inc.
1, Toyota-cho, Toyota	19001 South Western Avenue
Aichi, 471-8571, JAPAN	Torrance, CA 90509

2. Description of the Defect

The electronic element in the inverter may crack due to heat stress resulting in abnormalities in vehicle operation. The MIL is activated and code P0A78 is set. The motor controlling ECU delays processing due to delayed timing and also sets code P0A7A. The vehicle may enter "Fail Safe" Mode with only the engine operational and the hybrid function of the vehicle deactivated.

3. Description of Vehicles Potentially Affected

<u>Make</u>	<u>Model Year</u>	<u>Model</u>	<u>Test Groups</u>	<u>Engine</u>
Toyota	2006	Highlander HV	6TYXT03.3CC1	3MZ-FE
Lexus	2006	RX400h	6TYXT03.3CC1	3MZ-FE
Toyota	2007	Highlander HV	7TYXT03.3CC1	3MZ-FE
Lexus	2007	RX400h	7TYXT03.3CC1	3MZ-FE
Toyota	2008	Highlander HV	8TYXT03.3CC4	3MZ-FE
Lexus	2008	RX400h	8TYXT03.3CCU	3MZ-FE

4. Number of the Affected Vehicles and the Address of the Plants at Which the Affected Vehicles Were Produced

(1) Number of affected vehicles

Sales volume: 6TYXT03.3CC1 approximately 78,600 units
7TYXT03.3CC1 approximately 39,300 units
8TYXT03.3CC4 approximately 22,700 units
8TYXT03.3CCU approximately 22,700 units

(2) Address of the Plant

Toyota Motor Kyushu Inc.
Miyata Plant
1, Kamiaruki, Miyawaka-City,
Fukuoka, 823-0015, JAPAN

5. Evaluation of Emissions Impact and Description of Driveability Problems

Emissions Impact:

Emissions will increase since the engine is operational at all times and the hybrid function of the vehicle is deactivated. The overall effect is judged to be minimal since MIL is activated and it is judged the customer will take the vehicle to a dealer for repair immediately.

Driveability Problem:

It shifts to fail-safe mode and becomes only an engine drive. Moreover, the hybrid function of the vehicle will be deactivated.

6. Emission Data Related to the Defect

There is no emission data available at this time.

7. Anticipated Manufacturer Follow-up

The Engine Control Module (ECM) of affected in-use vehicles will be "Reflashed" or "Replaced" with a modified one by a Toyota or Lexus dealership under warranty.